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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,276

07/08/2003

Hiroshi Hayama

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EXAMINER

VU, TUAN A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/614,276	Applicant(s) HAYAMA ET AL.	
	Examiner TUAN A. VU	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/08/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/8/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed 7/08/2003.

Claims 1-9 have been submitted for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-4, 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a “useful, concrete, and tangible result” be accomplished. An “abstract idea” when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the “useful arts” when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a “useful, concrete and tangible result”.

The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. The following link on the World Wide Web is the United States Patent And Trademark Office (USPTO) reference in terms of guidelines on a proper analysis on 35 U.S.C. §101 rejection.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Specifically, **claims 1 and 3** recite apparatus for pointing attributes for program concerning computer system comprising action name, component name, program name, storage unit for storing name correspondence, input unit, attributes update unit and control unit for controlling execution of action component. As a whole, the apparatus is construed as built upon

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functionality of software-implemented elements (input unit, update unit, and control unit), and since the attribute storage unit is disclosed as file (see Specifications: pg. 12), there is no evidence that the apparatus constitute hardware in the purport to realize the software elements being recited. The claims (1 and 3) cannot belong to any of the 4 categories of statutory subject matter. Further, listing of mere 'Functional Descriptive Material' (see USC 101 Guidelines, Annex IV, pg 52-54) constitutes listing of software that cannot be realized into real world results, hence the claimed functionality remains an abstraction or a non-practical application. As the dependent claims fail to provide hardware support to remedy to the above, claims 1-2, 3-4 are all-together rejected for constituting non-statutory subject matter.

Likewise, the 'computer system' recited **in claim 9** is also perceived as having the same software-implemented entities as set forth above, hence is equally rejected as non-statutory.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5, 7, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murren et al, USPN: 7,346,921 (hereinafter Murren)

As per claim 1, Murren discloses an apparatus for pointing an action attribute of an electronic application system which performs a process concerning an application from applicant terminals targeted to applicants such as residents or enterprises by using actions representing individual process businesses (Fig. 2) necessary for proceeding with the process concerning the

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application (Fig. 9), action components representing individual business factors constituting each of said process businesses and programs for execution of said business factors, said action attribute pointing apparatus for electronic application system comprising:

an action name assigned to an action to specify said action (e.g. behavior ... commands defined by that interaction - col. 9 lines 61-67), an action component name assigned to an action component to specify said action component (instantiated object, class definition, input attribute – col. 9 lines 52-59), and component name correspondence information (e.g. *a method of object ... extracts attributes retrieving values* - col. 9 line 61 to col 10 line 2) for making the correspondence between said action name and said action component name;

program name correspondence information for making the correspondence between said action component name and a program name (*execution model, request-response model* - col. 9 lines 36-42; Fig. 7) assigned to said program to specify said program;

a definition information input/execute unit for inputting definition information (step 512, view 508 – Fig. 2) concerning said correspondence information stored in said action attribute storage unit;

an action attribute storage contents prepare/update unit for preparing/updating the contents of the correspondence information on the basis of the definition information inputted by means of said definition information input/execute unit (Fig. 5 – Note: select command then extracts to retrieve method and associated attributes – steps 506-512 -- reads on preparing contents of said correspondence information; see *prepare method* - col. 12, line 35 to col. 13 line 14); and

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an action control unit for controlling the execution of said action component by consulting with said correspondence information (steps 514-520, Fig. 5; Controller 406, Fig. 4).

Murren does not explicitly disclose an action attribute storage unit for storing said *component* name correspondence information and said *program* name correspondence information; nor does Murren disclose preparing/updating contents of said attribute storage unit, and controlling execution by consulting of said action attribute storage unit.

However, Murren teaches extracting (*) correspondence information for program and component in view of carrying out a functionality within a runtime interface (extracts - col. 9 lines 54 to col. 10 line 2) such that extracting of object for a given command or behavior to fulfill a request model (see col. 9 lines 36-47) and this is indicative of enabling extracted information to be assembled towards invoking the requested commands and whereby constitute a pre-runtime structural container having gathered persisted information as component name correspondence information and program name correspondence information – see *name, interaction, store 404*, Fig. 4; *User 716, Grant/Deny* - Fig. 7). Based on the tight constraint such that the collected correspondence information should be present for carrying out execution of a user's process (see col. 10, line 42-55) it would have been obvious for one skill in the art at the time the invention was made to implement Murren's program controller and storing of object (see store 436 - Fig. 4) so that instantiated object are stored with a dynamic storage unit putting together *component name correspondence information and program name correspondence information*, because this form of instantiated storage/container as set forth above would enable the framework to consult its content, thereby invoking of the corresponding methods based on the extracted -- refer to (*) -

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correspondence information in the course of the model execution as presented Murren's approach (see Fig. 5)

As per claim 3, Murren discloses an apparatus for pointing action attributes of programs concerning a computer system by using actions representing individual process businesses (refer to claim 1) necessary for proceeding with processes concerning the computer system, action components representing individual business factors constituting each of said process businesses (refer to claim 1) and programs for execution of said business factors, said program action attribute pointing apparatus comprising:

an action name assigned to an action for specifying said action, an action component name assigned to an action component to specify said action component, and component name correspondence information for making the correspondence between said action name and said action component name (refer to claim 1);

program name correspondence information for making the correspondence between said action component name and a program name assigned to a program to specify said program (refer to claim 1);

a definition information input/execute unit for inputting definition information (refer to claim 1) concerning said correspondence information stored in said correspondence information;

an action attribute storage contents prepare/update unit for preparing/updating the contents of said correspondence information on the basis of the definition information inputted (refer to claim 1) by means of said definition information input/execute unit;

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and an action control unit for controlling the execution of said action component by consulting with said correspondence information of said correspondence information (refer to claim 1).

Murren does not explicitly disclose an action attribute storage unit for storing said component name correspondence information and said program name correspondence information; nor does Murren disclose preparing/updating contents of said attribute storage unit, and controlling execution by consulting of said action attribute storage unit. But these limitations have been addressed in claim 1.

As per claim 5, Murren (in view of the rationale set forth in claim 1) discloses a method for pointing an action attribute of an electronic application system which performs a process concerning an application from applicant terminals targeted to applicants such as residents or enterprises by using actions representing individual process businesses necessary for proceeding with the process concerning the application, action components representing individual business factors constituting each of said process businesses and programs for execution of said business factors, said action attribute pointing method comprising:

a step of pointing an action attribute by using an action name assigned to an action to specify said action, an action component name assigned to an action component to specify said action component, component name correspondence information for making correspondence between said action name and said action component name,

program name correspondence information for making the correspondence between said action component name and a program name assigned to a program to specify said program, and

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an action attribute storage unit for storing said component name correspondence information and said program name correspondence information (refer to obviousness rationale in claim 1);

a definition information input/execute step of inputting definition information concerning said correspondence information stored in said action attribute storage unit (refer to claim 1);

an action attribute storage contents prepare/update step of preparing/updating the contents of said action attribute storage unit (refer to claim 1) on the basis of the definition information inputted in said definition information input/execute step; and

an action control step of controlling the execution of said action component by consulting with said correspondence information of said action attribute storage unit (re claim 1).

As per claim 7, Murren (in view of the rationale set forth in claim 5) discloses method for pointing an action attribute of programs concerning a computer system by using actions representing individual process businesses necessary for proceeding with processes concerning said computer system, action components representing individual business factors constituting each of said process businesses and programs for execution of said business factors, said program action attribute pointing method comprising:

a step of pointing an action attribute by using an action name assigned to an action to specify said action, an action component name assigned to an action component to specify said action component, component name correspondence information for making the correspondence between said action name and said action component,

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program name correspondence information for making the correspondence between said action component name and a program name assigned to a program to specify said program, and

an action attribute storage unit for storing said component name correspondence information and said program name correspondence information;

a definition information input/execute step of inputting definition information concerning said correspondence information held in said action attribute storage unit;

an action attribute storage contents prepare/update step of preparing/updating the contents of said action attribute storage unit on the basis of the definition information inputted in said definition information input/execute step; and

an action control step of controlling the execution of said action component by consulting with said correspondence information of said action attribute storage unit;

all of which limitations having been addressed in claim 5.

As per claim 9, Murren discloses a computer system operating by using actions representing individual process businesses (refer to claim 1) necessary for proceeding with processes concerning the computer system, action components representing individual business factors constituting each of said process businesses (refer to claim 1) and programs for execution of said business factors, said computer system comprising:

an action name assigned to an action to specify said action, an action component name assigned to an action component to specify said action component and component name correspondence information for making the correspondence between said action name and said action component name (refer to claim 1);

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program name correspondence information for making the correspondence between said action component name and a program name assigned to a program to specify said program (refer to claim 1);

an action control unit for controlling the execution of said action components by consulting with said correspondence information (refer to claim 1)

Murren does not explicitly disclose an action attribute information storage unit for storing said component name correspondence information and said program name correspondence information; and controlling the execution of said action components by consulting with said correspondence information of said action attribute storage unit. However, these limitations have been rendered obvious as set forth in claim 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 4, 6, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murren et al, USPN: 7,346,921 (hereinafter Murren) further in view of Bowman Amuah, USPN: 6,636,242 (hereinafter Bowman).

As per claim 2, Murren does not explicitly disclose wherein said action attribute storage unit includes

component execution sequence information for defining the execution sequence of said action components; and

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component execution form information for defining, in connection with said action components during their execution.

However, Murren discloses collecting attribute and related methods for a execution model as to fulfill a user request (see Fig. 6) or interaction command (Fig. 5) wherein some constraints must be satisfied (see Fig. 9). As Murren implements a multi-layered framework for executing a user request, a Business layer model is extracted and authentication model are consulted (see Model 270, execution model 230; Fig. 3), the presentation layer is perceived as supported the execution environment of the extracted information from the persisted models (execution 202, Presentation 212 – Fig. 2), the tight relationship between model information and how the invoked methods are carried out (see Fig. 5) indicates a sequence being predefined by a model. To that effect, Murren teaches storage of UML use cases (col. 5 lines 46-51) reusable Java (col. 12 lines 49-58) addressing an execution sequence (e.g. col. 8 lines 36-41) and processing a view for which sequence is pre-defined (col. 16 lines 34-41). Analogous to implementing a model execution as Murren using UML use case, Bowman teaches sequences of actions presented as views to the framework presentation (Bowman: Fig 8-10; Fig 40-42; Fig. 98-99) using persisted patterns or reusable components. Bowman discloses instantiated sequence of actions (see Fig 62-63, 98-99) to fulfill a user's request (or method invoked) and provided as a activity view as in a runtime correspondence information between class name, methods and attributes implicated in the UML model-based to instantiate a sequential flow (see Bowman: validateRule – Fig. 128, 131, 132), as to validate a return value from a network transmission (see Bowman: Fig 120-121, 126-127) for developing a business logic as per user request. It would have been obvious for one skill in the art at the time the invention was made to

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implement the storage unit in Murren's execution model so that modeling information would assemble or instantiate sequence of actions so that when consulted such predefined sequences would support a runtime view as set forth in Murren for a user's request regarding a business process to be realized via Java objects and class methods invocation, enabling proper validation of runtime results or authenticate user data as contemplated in Murren (see step 508 -Fig. 5, 8-9; *view-error* – col. 19 Table 2: lines 101-106; *loginUser.hasPermission* - col. 17 Table 2: li. 47-51)

Nor does Murren explicitly disclose storage unit comprising information for defining normal time execution executable during normal operation, exception occurring time execution executable during occurrence of exceptional operation and indispensable execution executable during both the normal and exceptional operations and also defining layering of processes. Murren disclose persisted user information like username, and password (see Fig. 4) and methods to deny a permission (see Fig. 7) to implement a flow regarding observing a enterprise policy (col. 17 Table 2: li. 47-51, see 702, 704, 720 – Fig. 7). Based on the rationale as set forth above, it would have been obvious (based on Bowman UML constructs; see Bowman: *exception* Fig .144) for one skill in the art at the time the invention was made to implement Murren's persisted data (i.e. model constructs supporting sequence of required steps – see Murren Table 2) regarding the *user* and associated Object-oriented *methods* to observe rules by which the business process can be allowed to proceed (see Fig 7). One of ordinary would be motivated to do so because such predefined information would serve as guidance by which pre-defined operation would normally occur as and by which predefined of exceptional operations would be effected; that is, consulting collected information during Murren's executing a model would

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define *indispensable sequence* of invocation (as suggested in Murren: col. 16 lines 34-41; Table 2) in terms of normal operations sequence in case user permission is granted as opposed to exceptional event (as taught in Bowman) when some condition is not met (see Murren: col. 19 Table 2: lines 101-106; *loginUser.hasPermission* - col. 17 Table 2: li. 47-51).

As per claim 4, refer to claim 2.

As per claim 6, 8, refer to claim 2.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/

Primary Examiner, Art Unit 2193

February 25, 2009